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POTENTIAL RISKS TO INTERNATIONAL JOINT VENTURES IN DEVELOPING ECONOMIES: THE GHANAIAN CONSTRUCTION INDUSTRY EXPERIENCE

Ahiaga-Dagbui, D.D¹, F.D.K Fugar², J.W McCarter¹, E. Adinyira²

¹Department of Civil Engineering and Construction Management, Heriot- Watt University, Edinburgh; email: dom.dagbui@yahoo.com; W.J.McCarter@hw.ac.uk

²Department of Building Technology, Kwame Nkrumah University of Science and Technology, Kumasi Ghana; email: fdkfugar.cap@knust.edu.gh; adinyira.feds@knust.edu.gh

Abstract

International construction companies are increasingly entering into joint ventures with local companies in developing countries to explore perceived profitable opportunities overseas. Joint ventures generally offer a number of benefits but they can become very difficult to manage as a result of many complexities introduced by the association of two or more companies from different countries, with differing political, cultural and legal frameworks, technical and managerial capabilities, and national economic environments.

This theoretical study assesses the risks associated with International Construction Joint Ventures in developing economies with particular reference to Ghana. The nature, strengths, weaknesses, opportunities and threats within the Ghanaian construction industry were reviewed. The economy, governance, business environment, infrastructure, resources, etc. of Ghana were also assessed.

The main risks factors to International Joint Ventures (IJVs) identified in Ghana can be categorised into two: *major risk factors* including the microeconomic and financial risk factors and joint venture partner problems. The client's ability to finance the projects and poor technical, financial and managerial capacities of Ghanaian construction firms were the main factors in this group. The *minor risks factors* include the availability and high cost of construction materials, issues of bribery and corruption, power supply problems and security.

Key words: International Joint Ventures; Risk Factors; Construction Industry; Developing Countries, Ghana

1.0 Introduction

Globalisation has offered new opportunities for organisations in the construction sector to enter into international construction markets to compete internationally (Han et al., 2005 cited in Jamil et al., 2008) using international joint ventures as vehicles for such competitions. International joint ventures have been credited with a number of benefits including risk sharing (Yan and Luo, 2001), enhanced operational capacity (Ozorhon, 2007; Adnan, 2008; Kumaraswamy et al., 2000; Yan and Luo, 2001; Acquaah, 2009), accessibility to new and unfamiliar overseas markets (Matthews, 1999; Adnan, 2008) and increased competitiveness (Acquaah, 2009; Kogut, 1988; Gale and Luo, 2004; Harrigan, 1988; Lim and Liu, 2001; Yan and Luo, 2001). On the other hand, many studies in international joint ventures have identified IJV as a difficult organizational form to manage because of the many complexities introduced by the involvement of two or more companies from different countries, with differing political, cultural and legal frameworks, technical and managerial capabilities, and national economic environments, amongst others (Huang, 2003)

Indeed, many IJVs have failed as a consequence of these risks. According to Ozorhon et al. (2007), the failure rate in IJVs is higher when compared to domestic joint ventures. Beamish and Berdrow (2003) have established that more than 50% of IJVs in developing countries alone fail and over 30% fail in developed countries with 70-80% of proposed joint ventures never even getting off the ground (CISIBIS, 1997).

The objective of this study is to assess from literature the potential risks to an International Construction Joint Venture in Ghana. The economy, governance, business environment, infrastructure, resources, etc. of Ghana were assessed. The significance of this study lies in the fact that the success of cross-national arrangements such as IJVs depends on a thorough understanding of the nature of the internal and external risks posed by host country conditions and efficiently mitigating and managing these risks before and during the construction period.

2.0 Risks to International Joint Ventures

A number of authors have grouped risks associated with IJVs according to their sources or similarities (Ding, 1996). Ofori (2003) and Ozorhon (2007) have described risk factors related to government's intervention in business activities of companies, either directly or indirectly through fund repatriation policies, labour and immigration restrictions, coup d'état, etc as *political risks*. Lowe (2007) has called risk factors which directly affect the profitability of the venture such as inflation, taxes, credit ratings and exchange rates as *financial risks*. Bing et al (1999) and Adnan (2008) have categorised host country risks into three, namely *internal risks* (risks unique to the JVs because of the nature of the different organizations involved-firm sizes, experience, technical abilities, etc.); *project-specific risks* (risks particular to the project itself-scope, complexity, budget, etc) and *external risks* (risks associated with

the financial, social, cultural or political environment in which the joint venture operates).

3.0 Ghana

With a population of 24 million and fledgling democracy, Ghana has been rated the most peaceful nation in Africa by the Institute for Economics and Peace in 2008 (now third behind Botswana and Mozambique in 2010). The country was given a sovereign credit rating of B⁺ (Standard & Poor's Financial Services, 2009), the fastest reforming nation on the continent and also as one of the top ten business reformers in the world in the World Bank Doing Business report in 2008.

Ghana currently enjoys significant stability in macro-economic activity, largely because of the high level of support provided by her Developmental Partners (Multi Donor Budget Support in 2009 was US\$425 million) (World Bank, 2009). 'Steep fluctuations' experienced in the exchange rate of the Ghanaian currency against the major world currencies virtually 'ceased' when the World Bank and IMF announced new budgetary support of over US\$1.5 billion in mid-2009 (World Bank, 2009). The IMF (2010), has described Ghana as being 'on track' to achieving its fiscal targets of significant reduction in budget deficits to 8% by the end of 2010 from 20% in 2008. The OECD (2008) sums the economic development of Ghana in these words: 'Sustained reforms have placed the country on the brink of becoming an emerging market.'

Ghana also became the world's latest oil producing country in December 2010, giving the national economy a positive outlook. The Ghana National Petroleum Company (GNPC) estimates a maximum revenue contribution of US\$1.2 billion in 2017 and an average yearly contribution of US\$800 million between 2011 and 2029 from the oil reserve.

4.0 Construction Industry of Ghana

The construction industry in Ghana accounted for 10% of the Ghana's GDP (Bank of Ghana, 2009) and remains as one of the major routes for generating or creating new wealth and value to meet other economic and social goals in Ghana. However, the industry is fraught with such problems as low productivity; lengthy pre-contract award procedures; land disputes; corruption; extensive delays resulting in time and cost overruns and unsatisfactory quality of work. The procedures for honouring contractors' and suppliers' claims for payment is frustratingly long (Fugar et al., 2009). Again financial and fiscal constraints have led to insecurity of funding for construction projects, payment arrears to contractors and consultants and even bankruptcy of some construction firms (World Bank, 2003; Sackey, 2008). The accumulated interest on late payments coupled with the volatile market make matters even worse, at least in terms of funding (World Bank, 2003).

5.0 Risks to an international joint venture in Ghana

For the purposes of this paper, the potential risks to IJVs in Ghana are classified as *major and minor*.

5.1 Major risks to IJVs in Ghana

This group of risk factors are the most important or critical factors that can that have the greatest potential, *ceteris paribus*, to ‘make or break’ an IJV in Ghana. These risks are largely external to the IJV and thus are often outside the direct control of the management.

Table 1: Major Risks

Economic/Financial	Partner Issues
i. Client’s ability to meet financial requirements	i. Local Partner’s resourcefulness-financial and equipment capacity
ii. Inflation	ii. Technical capabilities
iii. Exchange rate fluctuations	iii. Project Management capability

5.1.1 Economic/Financial Risk Factors

These are the factors that ultimately affect the profitability of the venture in the host country. An adverse trend in these factors can erode all returns on investment and cause failure of the joint venture.

Client’s ability to meet financial requirements

Ghana, like most Sub-Saharan African countries, is a low-income developing country. The country, until recently, had large financial debts and had to subscribe to the Highly Indebted Poor Country (HIPC) Fund to relieve it of accumulated debt. The benevolence of the World Bank and IMF has also helped the country reduce its budget deficit from 20% to 8% in 2009. One can only wonder what would happen when there is no more support from these multi-donor organisations and development partners. This can be a major risk factor as the Government is the major financier of most projects in Ghana.

Inflation/ Exchange Rate Fluctuation

These are two very important financial indicators that have a significant bearing on the cost of delivering a project. The exchange rate indicates how the Ghanaian Cedi (GH¢) is performing against other world major currencies. The Ghanaian Cedi experienced very steep fluctuations against the Pound and Dollar until mid-2009 when IMF and World Bank came to the rescue. It is now somewhat stable with 1GBP≡2.2GH¢ and 1US\$≡1.5GH¢ (Ghana Statistical Service, 2010; World Bank, 2010). The question again is, are these figures sustainable? Will the Ghanaian currency recover strongly against other currencies with additional revenue from the

oil production? Or will they fluctuate again in the face of improvement in the financial performance of these major currencies?

Also, average inflation increased from 10.7% in 2008 to 19.5% 2009. Ghana's inflation rate has since dropped from 14.78% in January, 2010 to 9.52% in June 2010 (Bank of Ghana, 2010, 5/08/10). These values indicate the average change in base price of various commodities on the Ghanaian market. High inflation will lead to a rise construction cost.

It may be naive, in the authors' view, to be overly optimistic of any significant changes in the economic performance of Ghana in the near future, since Ghana's economy is heavily dependent on imports. Thus the macroeconomic health of the nation is thus closely tied to the vagaries of the global crude oil price. Business may not look attractive unless the country is able, somehow, to break its present over-dependence on donor support, capitalise on and maximise the benefits of its new found oil resource.

5.1.2 Partner Problems

International Construction Joint Ventures (ICJVs) are essentially only possible with two or more independent construction firms contributing finance, staff, plant and equipment, experience and knowledge to the achievement of agreed aims and objectives. Tasks are shared amongst all parties and the performance of the ICJV is closely linked with the individual performance of all involved parties.

Local Partner's Financial and equipment capacity

Majority of Ghanaian contractors lack sound financial base. They do not have sufficient access to funds, credit facilities and do not have the appropriate technological capabilities, plant and equipment and key personal to handle projects properly (Egmond & Erkelens, 2007). Their financial woes are deepened by delays in payment, especially, for work done on public projects. To sustain liquidity, some contractors trade quality and value for money by compromising on quality materials or workmanship. Some even end up abandoning projects altogether (Westring, 1997).

Technical and management capabilities

To a large extent, the technical and managerial competencies of many of the Ghanaian contractors remain doubtful manifesting very often in poor quality product delivery (Agyakwa-Baah, 2009). This paucity of local expertise is evidently the reason the nation's major construction projects are awarded to the few large foreign contractors (Assibey-Mensah, 2009). The emerging new technologies in construction, design, materials and components and the growing sophistication of customer demands when juxtaposed with the current level technical and managerial competencies of the majority of Ghanaian contractors reveals a yawning gap which Ghanaian contractors must bridge to remain relevant in the 21st Construction Industry.

5.2 Minor risks factors to an IJV in Ghana

Minor risks are other significant factors that a foreign firm must take into consideration if it intends to set up a joint venture in Ghana. Ignoring or not properly dealing with these factors can also have serious repercussions on the IJV (See Table 1)

Table 1: Minor Risks

Administrative/Governance	Project Related	Infrastructure	Security
i. Policies, laws and regulations	i. Availability of resources	i. Energy supply	Social unrest
ii. Corruption	ii. Technical complexity of project	ii. Communication and Transport.	
iii. Bureaucracy	ii. Competence of other project parties		

Administrative/Governance Factors

Even though the Ghanaian Government is doing a lot to improve the procedures for starting business in Ghana, they are still frustratingly burdensome and time-consuming. Heritage Foundation and the Wall Street Journal (2010) wrote that ‘non-transparent and burdensome bureaucracy, political influence, and corruption are deterrents’ for doing business in Ghana. Table 3 below conveys this impression. It is worth noting that these rankings are out of 183 countries worldwide.

Table 3: Doing business in Ghana (Heritage Foundation, 2010)

Ease of...	Rank 2010	Rank 2009	Change in rank
Starting a Business	135	136	+1
Registering Property	33	31	-2
Dealing with Construction Permits	153	144	-9
Overall IFC Doing Business rank of Ghana	92	87	-5

Source: [Heritage Foundation Economic Freedom Index 2010](#)

Debrah (2002) corroborates this view by stating, ‘corruption is rife’ in Ghana in spite of the Government’s policy of ‘zero tolerance’ for corruption. Bureaucracy continues to cause expensive delays to businesses in Ghana. According to the Corruption Perception Index (2009) by Transparency International, ‘corruption is perceived as a serious challenge by country experts and businessmen.’ There exists a widespread perception of Government officials taking what is termed as ‘kick-backs’ before awarding contracts.

Project Related Factors

One of the challenges facing the construction industry is the high cost and frequent shortage of materials. Presently, over 70% of building materials are imported (Ghana

Statistical Service, 2010). In cases where they are manufactured locally, most of the raw materials are imported. For example, cement is produced by two main factories, GHACEM and Diamond Cement Ghana Ltd. The two companies import their raw materials, clinker and gypsum. Furthermore, their production cost is affected by the erratic power supply by the Electricity Company of Ghana and the frequent upward adjustment of electricity tariffs.

The ability of all other supply chain members to deliver their tasks remains very crucial to the joint venture's ability to meet its project objectives. Unfortunately, within the Ghanaian construction industry these players are plagued with the same kind and level of problems that affect the main contractors already identified within this paper. Suppliers, for instance, usually have a long list of debtors and most of their operations are on small-scale basis. These problems seriously affect the overall performance of the construction industry in terms of time, cost and quality (Sarpong, 2009; Acquah, 2009).

Obviously, the ability of construction firms to deliver any scale of construction project depends on their technical, financial and managerial capabilities. Little needs to be said again about the ability of the Ghanaian firms to deliver on complex construction projects. This lack of ability is one of the main reasons given by Government for awarding major projects of national interest to foreign firms.

Infrastructure

Transport in Ghana is mainly by road network of 39,409 km stretch, with only about 15.7% of this paved. Road transport accounts for 98% of freight ton-miles and about 97% of passenger miles in the country (GIPC, 2010). However, the main infrastructure of concern in Ghana presently is power supply. The cost of the major construction materials, cement and steel reinforcement depends on the cost and uninterrupted supply of electricity. Unfortunately, both are daunting problems with no end in sight.

Table 4: Quality of electricity supply infrastructure (World Bank Enterprise Survey, 2010)

Indicator	Ghana	Region	All countries
Number of power outages in a typical month	9.70	10.61	9.01
Value lost due to power outages (% of sales)	6.03	6.14	4.94
Delay in obtaining an electrical connection (days)	24.39	33.16	37.20

Security issues

Even though Ghana is generally a peaceful country there is protracted ethnic unrest in the northern part of the country and pockets of chieftaincy disputes scattered all over

the country. These have the potential of escalating into large scale ethnic and tribal war if no lasting solutions are found as soon as possible.

Conclusions

This theoretical research has investigated the potential risks to international joint ventures in the Ghanaian construction industry. Using evidence from the literature the authors have contributed to the understanding of the potential risks foreign contractors are likely to face within the Ghanaian business environment. Although some risk factors may be more critical than others, the project success will depend on a combined effect of all risks, response strategies used to minimise their effect and the organisation's ability to manage them. The research is limited by its theoretical nature. A future research based on empirical evidence is therefore proposed.

References

- ACQUAAH, M. (2009). International joint venture partner origin, strategic choice, and performance: A comparative analysis in an emerging economy in Africa. *Journal of International Management*, 15, 46-60.
- ADNAN, H. (2008). An Assessment of Risk Management in Joint Venture Projects (JV) in Malaysia. *Asian Social Sciences*, 4 (6).
- AGYAKWA-BAAH, A. B. (2009). *Risk Management in the Ghanaian Construction Industry* Master thesis Sheffield Hallam University.
- ASSIBEY-MENSAH, G. O. (2009). Ghana's Construction Industry and Global Competition: A research note. *Journal of Black Studies*, 39, 974-989.
- BEAMISH, P. & BERDROW, I. (2003). Learning From IJVs: The Unintended Outcome. *Long Range Planning*, 36, 285-303.
- CISIBIS (1997). A pragmatic view of joint ventures and alliances: Workshop Paper. The Antidote.
- CPI (2009). Corruption Perception Index. Transparency International.
- DEBRAH, Y. A. (2002). Ghana. *Thunderbird International Business Review*, 44, 495-513.
- FUGAR, F. D. K., OWUSU-MANU, D. & ADINYIRA, E. (2009). Towards future activity phase and shift in dynamism of the Ghanaian construction Industry Kumasi: Kwame Nkrumah University of Science Technology, Ghana.
- GIPC (2010), Ghana Investment Promotion Council, Infrastructure of Ghana, <http://www.gipc.org.gh/pages.aspx?id=35> (accessed 10.05.10)
- GALE, A. & LUO, J. (2004). Factors affecting construction joint ventures in China. *International Journal of Project Management*, 22, 33-42.
- HARRIGAN, K. R. (1988). Joint ventures and competitive strategy. *Strategic Management Journal*, 9, 141-158.
- HUANG, Y. 2003. One country, two systems: Foreign-invested enterprises and domestic firms in China. *China Economic Review*, 14(4): 404-16.
- KOGUT, B. (1988). Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9, 319-332.
- KUMARASWAMY, M., PALANEESWARAN, E. & HUMPHREYS, P. (2000). Selection matters-in construction supply chain optimization. *International Journal of Physical Distribution of Logistic Management*, 30, 661-680
- LIM, E. C. & LIU, Y.(2001). International Construction Joint Ventures as a Market Penetration Strategy –some case studies in developing countries. In: *Proceeding of the 3rd International Conference on Construction Project Management*, 2001 Singapore. 377-389.

- JAMIL,M, MUFTI, N.A, KHAN, A.H.(2008). Risk Identification for International Joint Venture Construction Projects. *First International Conference on Construction in Developing Countries (ICCIDC - I)*, Karachi, Pakistan
- MATTHEWS, C. (1999). *Managing International Joint ventures: the route to globalizing your business*, London, Kogan Page Limited.
- OECD (2008). AEO 2008: Country Surveys/Reviews/Guides: Ghana.
- OZORHON, B. (2007). Effect of host country and project conditions in international construction joint ventures. *International Journal and Project Management*, 25, 799-806.
- SACEY, E. (2008). *An assessment of the applicability of partnering in the Ghanaian construction industry*. Unpublished Masters thesis, Unpublished Thesis, Heriot Watt University, Edinburgh, UK.
- SARPONG, V. O. (2009). *Project Risk Management Under partnering* Unpublished Masters thesis, University of Wolverhampton, UK.
- STANDARD & POOR'S FINANCIAL SERVICES (2009). Sovereign Credit Ratings for African Nations.
- VAN EGMOND E. & ERKELENS P.A. (2007) Technology and Knowledge Transfer for Capability Building in the Ghanaian Construction Industry. *CIB World Building Congress, 2007*.
- WESTRING, G. (1997). Ghana Public Procurement Reform. An Audit Report prepared for the World Bank, Stockholm: Advokatfirman Cederquist KB.
- WORLD BANK (2003). Country Procurement Assessment Report. Washington DC: Ghana Country Department, The World Bank.
- WORLD BANK (2009). Country Assistance Strategy for Ghana, FY08-11. *Report No. 39822-GH*. World Bank, West Africa Country Department 1.
- YAN, A. & LUO, Y. (2001) *International Joint Ventures: Theory and Practice*, London, M.E Sharpe Inc.